

CT has been successfully applied to whole cut filler (2% CT) as 17% homogenate in water without the filler balling up. A CV increase of 1.7 units was obtained for both the test product and control (water reordered). Cigarettes have been made to evaluate this product subjectively.

#### IV. RCB

Alternative means of evaluating the effect of microwave treatment of RCB were considered and equipment is being rented from Cober, Inc. because this was the most expedient way to complete this evaluation before the BL Pilot Plant is dismantled in December 1981.

A promising means of separating charcoal from ripper shorts is being evaluated using a Fluidized Bed Reclaimer made by SWECO. A tobacco recovery >80% (containing <0.4% charcoal) was indicated from feedstock containing ~3% charcoal. A discard product containing ~30% charcoal would result from this separation.

#### VII. REFERENCES

1. "M/C Primary Trial of STP Application to Burley" to C. G. Bates from C. H. O'Donohue dated 07/01/81, 07/16/81, 08/11/81, 08/13/81, 08/19/81, 08/25/81, 08/27/81, 08/20/81, 08/31/81 and 09/01/81.



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2022151422

CHARGE NUMBER : 1307

PROGRAM TITLE : Reconstituted Tobacco Development

PERIOD COVERED: August 7-September 8, 1981

PROJECT LEADER: G. Gellatly

#### I. RL PROCESS

Preliminary pilot plant trials were run at 40 fpm using the recently installed coater which demonstrated the feasibility of sizing one side of RL sheet and coating the other with a homogenate of size and CT. Some minor mechanical modifications are required before the product evaluation program is begun. During these trials a finished sheet weight ( $17.2 \text{ gm/ft}^2$ ) of up to three times the base weight was demonstrated. This is equivalent to applying all class tobaccos currently in the feedstock as an homogenate in CEL to an all stem base web.

#### II. RL PRODUCT

Park 500 trials to evaluate the effect of stem content on RL sheet quality, production rate and yield were completed and a report will be issued in October.

Park 500 trials to quantify the effect of improved refining on RL sheet quality and production rate will begin in September and are expected to be completed by the end of the year. New refiner plate designs which have been shown to improve sheet quality in the pilot plant will be evaluated.

A promising means of quantifying sheet formation by scanning the sheet with a photo electric cell and measuring the amplitude of the variation on a strip chart is being developed. Previously, sheet formation has largely been a visual subjective judgement.

#### III. CT APPLICATION TO TOBACCO MATERIALS

Several MC trials were run which demonstrated that 7.5% homogenized CT could be applied to burley strip with a reduced water/casing ratio (0.25/1; original formulation 1/1), which could be dried in the P&S driers to specification OV (21+1%).<sup>1</sup> The adhesion of the CT and the filling power of this CT burley product using the new formula is being determined.

Sand mills from three different manufacturers have been rented and will be evaluated in R&D for homogenization efficiency and durability to make a choice of homogenization efficiency and durability to make a choice of homogenization equipment for an MC installation before November. One of these sand mills has demonstrated 100% partical size reduction below  $5 \mu$  in the laboratories of Tennessee Eastman.

The equipment for application of homogenized CT to cut stem was tested in R&D and has been shipped to Louisville Factory for production trials. These trials will evaluate the application of CT/casing homogenate in the superwetting step followed by expansion in the ES tower. Demonstration trials are expected to begin during the week of 09/21/81.

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